

WHAT IS CLAIMED IS:

- 1 1. A gun support apparatus, comprising:
 - 2 a base portion;
 - 3 a first arm attached to the base portion, the first arm comprising
 - 4 a first upright member,
 - 5 a first distal support member,
 - 6 a first elongated link pivotably coupled to the first upright member and attached
 - 7 to the first distal support member, wherein the first elongated link is located between the first
 - 8 distal support member and the first upright member, and
 - 9 a first slider link attached to the first upright member and attached to the first
 - 10 elongated link, wherein the slider link comprises
 - 11 a first piston portion, and
 - 12 a first cylinder portion, wherein the first piston portion is adapted to
 - 13 slidably fit within the first cylinder portion,
 - 14 a second arm attached to the base portion, the second arm comprising
 - 15 a second upright member,
 - 16 a second distal support member,
 - 17 a second elongated link pivotably coupled to the second upright member and
 - 18 attached to the second distal support member, wherein the second elongated link is located
 - 19 between the second distal support member and the second upright member, and
 - 20 a second variable length link attached to the second upright member and attached
 - 21 to the second elongated link.

- 1 2. The gun support apparatus of claim 1, wherein the second variable length link is a second
2 slider link comprising:
3 a second piston portion, and
4 a second cylinder portion, wherein the second piston portion is adapted to slidably fit
5 within the second cylinder portion.
- 1 3. The gun support apparatus of claim 1, wherein the first slider link comprises a friction
2 element adapted to provide a variable coefficient of friction between the first piston portion and
3 the first cylinder portion.
- 1 4. The gun support apparatus of claim 1, wherein the first slider link further comprises a
2 dampener portion.
- 1 5. The gun support apparatus of claim 1, wherein the first slider link further comprises a
2 spring.
- 1 6. The gun support apparatus of claim 1, further comprising a dampener attached to and
2 extending between the first and second arms.

1 7. A gun support apparatus, comprising:
2 a base portion;
3 a first link extending along a first link axis and attached to the base portion at a proximate
4 end of the first link; and
5 a second link extending along a second link axis and attached to the base portion at a
6 proximate end of the second link, wherein a distal end of the second link is attached to a distal
7 end of the first link, wherein an angle formed between the first link axis and the second link axis
8 is less than 90 degrees, and wherein the second link comprises a slider mechanism providing a
9 variable length for the second link.

1 8. The gun support apparatus of claim 7, further comprising:
2 a third link extending along a third link axis and attached to the base portion at a
3 proximate end of the third link; and
4 a fourth link extending along a fourth link axis and attached to the base portion at a
5 proximate end of the fourth link, wherein a distal end of the fourth link is attached to a distal end
6 of the third link, wherein an angle formed between the third link axis and the fourth link axis is
7 less than 90 degrees, and wherein the fourth link comprises a slider mechanism providing a
8 variable length for the fourth link.

1 9. The gun support apparatus of claim 8, wherein the first and second links are jointly
2 rotatable about the base, and wherein the third and fourth links are jointly rotatable about the
3 base independent of the first and second links.

1 10. The gun support apparatus of claim 7, wherein the angle formed between the first link
2 axis and the second link axis is variable between about 10 degrees and about 50 degrees.

- 1 11. The gun support apparatus of claim 10, wherein the angle formed between the first link
2 axis and the second link axis is variable between about 20 degrees and about 40 degrees.
- 1 12. The gun support apparatus of claim 7, wherein the slider mechanism comprises:
2 a piston portion; and
3 a cylinder portion, wherein the piston portion is adapted to slidably fit within the cylinder
4 portion.
- 1 13. The gun support apparatus of claim 12, wherein the slider mechanism comprises a
2 friction element adapted to provide a variable coefficient of friction between the piston portion
3 and the cylinder portion.
- 1 14. The gun support apparatus of claim 7, wherein the slider mechanism comprises a
2 dampener.
- 1 15. The gun support apparatus of claim 14, wherein the slider mechanism comprises a spring.

1 16. A gun support apparatus, comprising:
2 a base portion;
3 a first arm attached to the base portion; and
4 a second arm attached to the base portion,
5 wherein the first arm comprises
6 a first upright member,
7 a first distal support member, and
8 a first slider mechanism pivotably coupled to the first upright member and
9 pivotably coupled to the first distal support member, wherein the first slider mechanism is
10 located between the first distal support member and the first upright member.

1 17. The gun support apparatus of claim 16, wherein the first distal support member is
2 removably attachable to a gun.

1 18. The gun support apparatus of claim 16, wherein the first slider mechanism comprises:
2 a piston portion; and
3 a cylinder portion, wherein the piston portion is slidably contained within the cylinder
4 portion.

1 19. The gun support apparatus of claim 18, wherein the first slider mechanism comprises a
2 friction element adapted to provide a variable coefficient of friction between the piston portion
3 and the cylinder portion.

1 20. The gun support apparatus of claim 16, wherein the first slider mechanism comprises a
2 dampener.

1 21. The gun support apparatus of claim 16, wherein the first slider mechanism comprises a
2 spring member.

1 22. The gun support apparatus of claim 16, wherein the second arm comprises:
2 a second upright member;
3 a second distal support member; and
4 a second slider mechanism pivotably coupled to the second upright member and
5 pivotably coupled to the second distal support member, wherein the second slider mechanism is
6 located between the second distal support member and the second upright member.

1 23. The gun support apparatus of claim 22, wherein the base portion comprises an upright
2 shaft, and wherein the upright shaft extends through the first and second upright members, such
3 that the first and second arms are pivotably coupled to the base portion via the upright shaft.

1 24. A method of assembling a gun support apparatus, the method comprising:
2 assembling first and second arm members, wherein assembling of each of the arm
3 members comprises
4 attaching a slider mechanism to an upright member, and
5 attaching the slider mechanism to a distal support member, such that the slider
6 mechanism is located between the distal support member and the upright member;
7 attaching the first arm member to a base portion; and
8 attaching the second arm member to the base portion.

1 25. A gun support apparatus, comprising:
2 an upright member;
3 a first distal support member;
4 a first variable length arm having a proximate end pivotably coupled to the upright
5 member, and a distal end pivotably coupled to the first distal support member, the first arm
6 comprising a first slider mechanism located between the first distal support member and the
7 upright member;
8 a second distal support member; and
9 a second arm having a proximate end pivotably coupled to the upright member, and a
10 distal end pivotably coupled to the second distal support member.

1 26. The gun support apparatus of claim 25, further comprising:
2 a base; and
3 an upright shaft coupled to the base, wherein the upright member is rotatably coupled to
4 the upright shaft.

1 27. The gun support apparatus of claim 26, wherein the base comprises a traversable track,
2 and wherein the upright shaft is traversably mounted to said track.

1 28. The gun support apparatus of claim 25, wherein the first slider mechanism comprises:
2 a piston portion; and
3 a cylinder portion, wherein the piston portion is slidably contained within the cylinder
4 portion.

1 29. The gun support apparatus of claim 28, wherein the first slider mechanism comprises a
2 friction element providing a variable amount of friction between the piston portion and the
3 cylinder portion.

1 30. The gun support apparatus of claim 25, wherein the second arm is a variable length arm,
2 and further comprises a second slider mechanism located between the second distal support
3 member and the upright member.

1 31. The gun support apparatus of claim 30, wherein the first and second slider mechanisms
2 each comprise:

3 a piston portion;

4 a cylinder portion, wherein the piston portion is slidably contained within the cylinder
5 portion; and

6 a friction element providing a variable amount of friction between the piston portion and
7 the cylinder portion.

1 32. The gun support apparatus of claim 31, wherein the first and second slider mechanisms
2 each further comprise an adjustment knob for varying said variable amount of friction by
3 applying variable force to said friction element.

1 33. The gun support apparatus of claim 25, wherein the first arm extends along a first link
2 axis, wherein the second arm extends along a second link axis, and wherein the first and second
3 link axes are horizontally inline with each other and vertically offset from each other.

1 34. The gun support apparatus of claim 25, wherein the first and second distal support
2 members are removably attachable to a gun.

1 35. The gun support apparatus of claim 34, wherein the first distal support member is adapted
2 to removably attach to a stock end of said gun, wherein the second distal support member is
3 adapted to removably attach to a barrel end of said gun, and wherein a first acute angle formed
4 between said first arm and said upright member is greater than a second acute angle formed
5 between said second arm and said upright member.

1 36. The gun support apparatus of claim 25, wherein said upright member is directly
2 traversably mounted to a track.

1 37. The gun support apparatus of claim 25, further comprising a base, wherein said base
2 comprises a track, and wherein said upright member is traversably attached to said base.

1 38. A method of assembling a gun support apparatus, the method comprising:
2 pivotably coupling a proximate end of a first variable length arm to an upright member;
3 pivotably coupling a first distal support member to a distal end of the first variable length
4 arm, wherein the first arm comprises a first slider mechanism located between the first distal
5 support member and the upright member;
6 pivotably coupling a proximate end of a second arm to the upright member; and
7 pivotably coupling a second distal support member to a distal end of the second arm.